CLAIMS

1. A complex fiber reinforcing material comprising a sheet-formed fiber reinforcing material composed of reinforcing fibers, and a non-woven fabric composed of short fibers and laminated on at least one side of the fiber reinforcing material, wherein the short fibers constituting the non-woven fabric pass through the fiber reinforcing material to integrate the fiber reinforcing material with the non-woven fabric.

2. A complex fiber reinforcing material comprising a sheet-formed fiber reinforcing material composed of reinforcing fibers, and a non-woven fabric laminated on at least one side of the fiber reinforcing material, wherein the non-woven fabric is integrated with the fiber reinforcing material by a pressure sensitive adhesive.

3. A complex fiber reinforcing material comprising a sheet-formed fiber reinforcing material composed of reinforcing fibers, and a non-woven fabric laminated on at least one side of the fiber reinforcing material, wherein the fibers constituting the non-woven fabric contain 5 to 50% by weight of low-melting-point fibers, and the fiber reinforcing material is integrated with the non-woven fabric by heat bonding.

4. A complex fiber reinforcing material according to any one of claims 1 to 3, wherein the size of the reinforcing

fiber yarns of the fiber reinforcing material is 550 to 270000 decitex, and the number of filaments per reinforcing fiber is 1000 to 400000.

5. A complex fiber reinforcing material according to any one of Claims 1 to 3, wherein the size of the reinforcing fiber yarns of the fiber reinforcing material is 550 to 23000 decitex.

6. A complex fiber reinforcing material according to any one of Claims 1 to 3, wherein weight per unit area of the fiber reinforcing material is 100 to 2000 g/m^2.

7. A complex fiber reinforcing material according to any one of Claims 1 to 3, wherein the woven fabric constituting the fiber reinforcing material has a cover factor of 95% or more.

8. A complex fiber reinforcing material according to any one of Claims 1 to 3, wherein the non-woven fabric contains low-melting-point fibers composed of a thermoplastic polymer having a low melting point.

9. A complex fiber reinforcing material according to any one of Claims 1 to 3, wherein the non-woven fabric contains conjugate fibers comprising a core at a ratio of 30 to 70% of the sectional area of the conjugate fiber.

10. A complex fiber reinforcing material according to Claim 9, wherein each of the conjugate fibers comprises the core composed of nylon 6 or nylon 66, and the sheath

composed of nylon copolymer.

11. A complex fiber reinforcing material according to any one of Claims 1 to 3, wherein weight per unit area of the non-woven fabric is in the range of 5 to 30 g/m^2.

12. A complex fiber reinforcing material according to any one of Claims 1 to 3, wherein the fiber reinforcing material comprises a uni-directional sheet comprising reinforcing yarns oriented in the direction of the length of the material.

13. A complex fiber reinforcing material according to any one of Claims 1 to 3, wherein the fiber reinforcing material comprises a uni-directional woven fabric comprising reinforcing yarns oriented in the direction of the length of the material, and auxiliary yarns thinner than the reinforcing yarns and oriented in the width direction to form a woven structure.

14. A complex fiber reinforcing material according to Claim 12 or 13, wherein the reinforcing yarns are oriented in the length direction at intervals of 0.1 to 5 mm in the uni-directional sheet or uni-directional woven fabric.

15. A complex fiber reinforcing material according to any one of Claims 1 to 3, wherein the fiber reinforcing material comprises a bi-directional woven fabric comprising reinforcing yarns oriented in the length direction and the width direction of the material to form a woven structure.

16. A complex fiber reinforcing material according to Claim 15, wherein the reinforcing yarns of the bi-directional woven fabric, which are oriented in at least one of the length direction and the width direction, are flat reinforcing yarns having a width in the range of 4 to 30 mm, and a thickness in the range of 0.1 to 1.0 mm.

17. A complex fiber reinforcing material according to any one of Claims 1 to 3, wherein the fiber reinforcing material comprises a stitch cloth comprising at least two groups of reinforcing yarns which are crossed each other and which are stitched with a stitch yarn.

18. A complex fiber reinforcing material according to any one of Claims 1 to 3, wherein the reinforcing fibers are carbon fibers.

19. A complex fiber reinforcing material according to any one of Claims 1 to 3, wherein the void ratio of the non-woven fabric is 30% to 95% of the total area of the non-woven fabric.

20. A complex fiber reinforcing material according to Claim 2, wherein the amount of the pressure sensitive adhesive used is 1 to 10 g/m^2.

21. A preform comprising a laminate of a plurality of the complex fiber reinforcing material according to any one of Claims 1 to 20, wherein the fiber reinforcing material and the non-woven fabric are alternately laminated.

22. A preform according to Claim 21, wherein the ~~fiber~~ reinforcing material ~~layers~~ are integrated with each other by heat bonding of the low-melting-point fibers contained in the non-woven fabric.

23. A preform according to Claim 21, wherein the fiber reinforcing material layers are integrated with each other by a pressure sensitive adhesive.

24. A method of producing a fiber reinforced plastic comprising covering a preform according to any one of ~~Claims 21 to 23~~ 1-3 with a bag film, injecting a resin into the bag film in a vacuum state to impregnate the complex fiber reinforcing material with the resin, and curing the resin.

25. A method of producing a fiber reinforced plastic comprising setting a preform according to any one of ~~Claims 21 to 23~~ 1-3 in a cavity formed by a he-mold and a she-mold, injecting a resin into the cavity in a vacuum state to impregnate the complex fiber reinforcing material with the resin, and curing the resin.